

## **ABSTRACT**

A non-linearity generator operates on a signal between a frequency converter and an amplifier and acts as a postdistorter for the component it follows and as a predistorter for the component it precedes, thus linearizing the overall input-output characteristic of the circuit. Cross-modulation components distorting an injected pilot signal provide a feed-back signal that is used to control the distortion applied by a non-linearity generator. The non-linearity generator can be adapted to cope with widely spaced input tones. The circuit may form part of a transmitter or a receiver.